

PM MATERIAL TYPES BY PROCESS TECHNOLOGY

Material		Powder Metallurgy (PM) Process Technology				
Classification	Description	Conventional	Forged	MIN*	Filters	Bearings
Iron & Steel	Iron	YES	YES			
	Plain Carbon Steel	YES	YES	YES		
	Structural Alloy Steel	YES	YES	YES		
	Specialized Alloy Steel	YES		YES		
Stainless Steel	Austenitic	YES		YES	YES	
	Ferritic	YES		YES	YES	
	Martensitic	YES		YES	YES	
	Precipitation Hardening			YES	YES	
Ferrous Soft Magnetic	Iron	YES		YES		
	Alloyed Iron	YES		YES		
	(P, Si, and Ni)**	YES				
Copper-Based	Copper	YES				
	Brass	YES			YES	
	Bronze	YES			YES	YES
	Diluted Bronze					YES
Aluminium Alloys ***	Standard Series (PM2014, 6061, 7075; PM-AL-14Si)	YES				
	Thermal Series (TC-2000)	YES				
	Mechanical Strength Series (MMC-1)	YES				

* Metal Injection Moulding

** Several PM alloying methods are utilised: elemental blends, diffusion bonded, fully alloyed, or combinations of these.

*** Various alloys are available including 2014 (Al-Cu-Mg-Si), 6061 (Al-Mg-Si-Cu) and 7075 (Al-Zn-Cu-Mg) plus Metal Matrix Composite (MMC) variants.